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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/512,051	11/10/2004	Akihiko Ito	2593-0150PUS1	8417
2292	7590	06/05/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			VELEZ, ROBERTO	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/512,051

Applicant(s)

ITO ET AL.

Examiner

Roberto Velez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-26 is/are pending in the application.  
4a) Of the above claim(s) 19-26 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 11-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 21 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/21/2004.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Claim 19-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 03/14/2006.
2. Applicant's election with traverse of Species I, Claims 11-18 in the reply filed on 03/14/2006 is acknowledged. The traversal is on the ground(s) that it should be no undue burden on the Examiner to consider all claims in the single application. This is not found persuasive because Applicant clearly points out to different Species, for example Fig. 23 and Fig. 24. The requirement is still deemed proper and is therefore made FINAL.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 11-13, 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by **Maeng (US Pat. 6,563,331)**.

Regarding claim 11, **Maeng** shows (Figures 1-4) a test and burn-in apparatus, in-line system using the test and burn-in apparatus, and test method using the in-line system comprising: one or a plurality of moving means [40, 34,

36] capable of gripping a plurality of said strip formats [10], conveying said strip formats [10] to said contact portions [23] without reloading said electronic devices from said strip formats [10], and (Column 8, Lines 1-8) pressing input/output terminals of said electronic devices against said contact portions [23] at a time while said electronic devices are loaded on said strip formats [10].

Regarding claim 12, **Maeng** discloses everything as claimed above in claim 1; in addition, **Maeng** shows (Figures 1-4) wherein said moving means [40, 34, 36] is capable (Column 8, Lines 35-38 and 45-47) of freely selecting the gripping number [10] within the number able to be gripped.

Regarding claim 13, **Maeng** discloses everything as claimed above in claim 1; in addition, **Maeng** shows (Figures 1-4) wherein said moving means [40, 34, 36] is capable (Column 8, Lines 35-38 and 45-47) of freely selecting the gripping number [10] being independent from other means (each moving means works independently).

Regarding claim 15, **Maeng** discloses everything as claimed above in claim 1; in addition, **Maeng** shows (Figures 1-4) wherein each of said moving means [40, 34, 36] grips and moves (Column 8, Lines 35-38 and 45-47) said strip format [10] from a loading (using 40, 34, 36) position of pre-test electronic devices to said contact portion [23].

Regarding claim 16, **Maeng** discloses everything as claimed above in claim 1; in addition, **Maeng** shows (Figures 1-4) wherein each of said moving means [40, 34, 36] grips and moves (Column 8, Lines 35-38 and 45-47) said strip

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format [10] from said contact portions [23] to a loading (using 40, 34, 36) position of post-test electronic devices.

Regarding claim 17, **Maeng** discloses everything as claimed above in claim 1; in addition, **Maeng** discloses (Column 8, Lines 22-26) wherein a sum of the numbers of contact portions in said test head [23] is  $2^n$ .

Regarding claim 18, **Maeng** discloses everything as claimed above in claim 1; in addition, **Maeng** discloses (Column 8, Lines 22-26) wherein  $n=5$  or  $n=6$ .

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maeng** (*US Pat. 6,563,331*) in view of **Kim et al.** (*US Pat. 6,518,745*).

Regarding claim 14, **Maeng** discloses everything as claimed above in claim 1.

**Maeng** fails to disclose wherein said any two or more moving means among said plurality of moving means have a substantially overlapping operation range on a contact group as a set of said contact portions. However, **Kim et al.** shows (Fig. 1) wherein said any two or more moving means [33, 32] among said

plurality of moving means have a substantially overlapping operation range on a contact group [21, 22, 23] as a set of said contact portions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of *Kim et al.* into the device of *Maeng* by having an overlapping operation range on a contact group among a plurality of moving means. The ordinary artisan would have been motivated to modify *Maeng* in the manner set forth above for the purpose of providing a faster way to test all the semiconductor devices.

### **Conclusion**

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
8. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Velez whose telephone number is 571-272-8597. The examiner can normally be reached on Monday-Friday 8:00am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Ha can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberto Velez  
Patent Examiner

  
**VINH NGUYEN**  
**PRIMARY EXAMINER**  
A.u. 2829  
05/30/06